



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,178	03/16/2001	Toyohisa Oya	2870-0164P	5742
2292	7590	11/29/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			CHEA, THORL	
			ART UNIT	PAPER NUMBER

1752

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/809,178

Applicant(s)

OYA ET AL.

Examiner

Thorl Chea

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17, 23-27, 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17, 23-27 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 17, 23-27, 30 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed fails to provide support for the claimed language “free from a dye-forming coupler”, and the language “wherein the silver image forming heat developable photosensitive material is capable of producing an image by itself and a functional layer for forming an image not provide on the silver image forming heat developable material” presented in claim 30.

The applicants pointed out that “support claim 30 includes claim 17 and example of the present application”. Upon reviewing the language presented in claim 17 and the Example in the specification such languages were not found. The language ““ free from a dye-forming coupler” is considered as a negative limitation to the present specification disclosure and also, the language “wherein the silver image forming heat developable photosensitive material is capable of producing an image by itself and a functional layer for forming an image not provide on the silver image forming heat developable material” is not disclosed in claim 17 or in the Example 1.

The applicants argue that an “application needs not contain a word-for-word description of the claimed invention to satisfy the written description. All that is required is that the application reasonably convey the claimed subject matter to those skill in the art. This point is illustrated in *Ex Parte Parks*, 30 USPQ2d 1234 (B.P.A.I.). In *Park*, the

Art Unit: 1752

invention related to a method of determining the nitrogen content of a sample by decomposing it. After the application was filed, the applicant inserted into the claims the recitation that the composition was conducted in the absence of catalyst. The Board reversed the Examiner's rejection of the amended claims, stating that (the examiner contends that the rejected claims lack adequate descriptive support because there is "no literal basis for the " claim limitation in the absence of a catalyst." Clearly, the observation of a lack of literal support does not, in and of itself, establish a prima facie case for lack of adequate descriptive support under the first paragraph of 35 U.S.C. 112.

30 USPQZd at 1236. The Board noted that the originally filed disclosure would have conveyed to one of ordinary skill in the art the concept of conducting the decomposition without the use of a catalyst. The Board indicated that the disclosure described several examples of the decomposition process without the mention of a catalyst, even though "the discussion would seem to cry out for a catalyst if one were used." 30 USPQZd at 1236. The Board was therefore of the opinion that the original description adequately supported the decomposition process without the presence of a catalyst and that the Examiner had failed to provide a prima facie case of lack of adequate written description. Similarly, in the present situation, Applicants respectfully maintain that the Examiner has failed to state a prima facie case that the language "free from a dye-forming coupler" is not adequately supported by the disclosure herein. Nevertheless, in the spirit of compact prosecution, the present Amendment deletes the language in question from the claims, thereby rendering moot this ground of rejection.

It is the Examiner's position that the argument is not persuasive. The fact in the case in the argument appears that the specification disclosure does not mention or contain any suggestion to use the catalyst, and there is no intention to use the catalyst in the applicants process. Therefore, the language "in the absence of catalyst" does not provide any new limitation to the specification as originally filed. The present specification disclosure, lines 19-38 which discloses, "the photothermographic material may be used either of monochromatic photosensitive materials and color photosensitive material. For obtaining a wide range of colors on chromaticity diagram by using three primary colors of yellow, magenta and cyan. The specification on page 88 cited the US Patent No. 4,708,928 which discloses the use of dye forming material such as leuco dye and the dye forming developing agent." The specification as originally filed encompasses a color film including the use of dye to form a color material such as yellow, magenta, and cyan primary color, and the use of the leuco dye and dye forming developing agent. It would have understood in the art that the primary color such as yellow, magenta and cyan primary color can be formed by color developer and color coupler. The specification as originally filed fail to disclosed any intend to exclude such as dye forming

Art Unit: 1752

coupler as part of the specification disclosure. Therefore, the language “free from a dye-forming coupler” is considered as a negative limitation to the present specification disclosure, and therefore, it raises the issue of new matter.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 30 is unclear with respect to the use of the language “said photothermographic material is a monochromatic photothermographic material” in combination with the language “free from a dye forming coupler”. It is unclear as it is intended to cover the scope of the a monochromatic material is a single color material having a color dye, but free from a dye-forming coupler, a silver image material such as black and white photothermographic material or otherwise. Therefore, the scope of protection sought for the type of material is unclear. Also, the scope of protection sought for “dye-forming coupler” is indefinite as the specification fails to clearly provide the metes and bounds thereof. The claiming “R¹¹ is an alkyl group or an aryl group having 1-10 carbon atom” since an aryl group is a ring of carbon atom that cannot be from ring with less than 3 carbon atom. Accordingly, the claiming of R¹¹ is an aryl group having 1-10 is indefinite. Also, the scope of protection sought “dye forming coupler” is unclear since the specification fails to provide metes and bound thereof.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1752

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17-22, 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Takeuchi (US Patent No. 5,851,745) or Nakamura et al (US Patent 6,013,421) in view of the combination of Cerquone et al (Cerquone), EP 0762196 (EP'196) and Shoei et al (US Patent No. 5,064,753). Note to Takeuchi in the abstract, the exemplified compound in columns 5-20 compound I-1 to I-28, column 63, lines 49-63, especially the compound in column 11, I-21, I-22 which contains a quinazoline group and $-(C=O)-NH-$ and alkyl and aryl group having more than one carbon atom; Nakamura in the abstract, exemplified compound in columns 7-33, compounds (1) to (90), and column 116, lines 57-67, column 117, lines 1-4, especially column 18, compounds (37), (43). Takeuchi and Nakamura disclose both photosensitive silver halide material and heat-development light sensitive material. In the case of a heat-development light sensitive material the light-sensitive silver halide emulsion may be used together with an organosilver salt oxidizing agent. Nakamura et al disclose the use of silver halide and reducible silver salt known as organosilver salt oxidizing agent silver salt of aliphatic acid in column 116, lines 15-67 and column 117, lines 1-4, and the use of binder in column 114, lines 23-30. Takeuchi discloses silver halide and organosilver salt in column 62-63, and binder in column 61, lines 11-19.

Cerquone discloses a photothermographic material, which contains a combination of the use of the color developer for dye forming coupler and the reducing agent for silver ion. Note for instant the sulfoamidophenol and the reducing agent, which react with silver salt oxidizing agent to produce desired dye image (column 6, compound A to D and lines 50-60). EP'196 discloses a

Art Unit: 1752

phenol compound as reducing agent for silver salt. Note for instance compound A on page 2 and compound on page 3. Shoei et al (US Patent 5,064,753) in column 60, lines 19-35 discloses a difference of photothermographic material such as black and white type which forms silver image by thermal development, or the color type which employs dye-providing materials. Light-sensitive color material of color type include those which are intended to produce monochromatic colors based on black or other single color-forming dye-providing material, as well as those which are designed to produce full color based on the formation of yellow, cyan and magenta colors.

It would have been obvious to use the phenol compound as reducing agent for silver ion including a known bisphenol reducing agent EP'196 combination with the color developer taught in either Takeuchi or Nakamura with an expectation of producing to produce a material having desired dye image.

7. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeuchi or Nakamura et al (Nakamura) as applied to claims 17-22, 25-27 above, and further in view of JP10339934 (JP'934). The phthalazine compound has been known in JP'934 as to provide a photothermographic material with low fog and to improve photothermographic property. See US patent no. 6,146,822 which is equivalent to the JP'934 in column 5, compound (I). It would have been to the worker of ordinary skill in the art to incorporate the phthalazine derivative taught in JP'934 for same reason, and thereby provide a material as claimed.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Takeuchi (US Patent No. 5,851,745) or Nakamura et al (US Patent 6,013,421) in view of the combination of Cerquone et al (Cerquone), EP 0762196 (EP'196) and Shoei et al (US Patent No. 5,064,753).

Art Unit: 1752

The teachings disclosed in Takeuchi (US Patent No. 5,851,745) or Nakamura et al (US Patent 6,013,421) in view of the combination of Cerquone et al (Cerquone) are as shown in the rejection in paragraph 6 above. Shoei et al (US Patent 5,064,753) in column 60, lines 19-35 discloses a difference of photothermographic material such as black and white type which forms silver image by thermal development, or the color type which employs dye-providing materials. Light-sensitive color material of color type include those which are intended to produce monochromatic colors based on black or other single color-forming dye-providing material, as well as those which are designed to produce full color based on the formation of yellow, cyan and magenta colors. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the bisphenols compound as reducing agent for silver ion taught in EP'196 for the reason taught in Cerquone combination with the dye providing compound taught in Shoei et al to produce a monochromatic colors based on black or other single color-forming dye-providing material, and thereby provide a material as claimed. The dye taught in Shoei et al is not a dye forming coupler.

Response to Amendment

9. Applicant's arguments filed September 15, 2005 have been fully considered but they are not persuasive for the reason set forth in the office action above. The applicants argue that "the compound of formula (1) as it is defined in claim 17 in its present form are neither taught nor suggest by the cited prior art, alone or in combination. Those references which employ a dye-forming coupler do not impact the present claims because they are excluded by the term "consisting essentially of" language claims. The phenol compounds of the present invention work as reducing agent for silver ion wherein the phenol compounds of Cerquone react with silver to

Art Unit: 1752

form a dye. The applicants further argue that the Examiner has employed impermissible hindsight, "picking and choosing" from the teaching of the prior art, in attempt to suggest the present invention.

It is the Examiner's position the argument is not persuasive. The term "photothermographic material" includes both black and white photothermographic material (silver image) and color photothermographic material. The term "consisting essentially of" prevent the use of any additive that modify the photothermographic material in a negative manner, but does not exclude any color coupler or any dye taught in the applied prior art of record that produce a color material. Therefore, the scope of the claimed photothermographic material still encompasses the scope of color material taught in Takeuchi or Nakamura et al. The argument with respect to Cerquone is not persuasive. Cerquone discloses two types of developer one is color developer such as 1,6-dichloro-4-substituted sulfoamidophenol and 2,6-dibromo-4-substituted sulfoamidophenol, and the other developers which are not sulfoamidophenol and which do not adversely affect the desired color image in the photothermographic element and composition thereof include bis-beta-naphthol reducing agent as described in US Patent 3,751,249 (column 6, lines 30-41). The applicants are referred to US Patent 3,751,249 in the abstract. Therefore, it has been known to use both color developing agent and reducing agent for silver salt to improve the color image material. The argument with respect to the impermissible hindsight, "picking and choosing from the teaching of the prior art is not persuasive. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was

Art Unit: 1752

within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, it has been known to use two developers in a photothermographic color material such as disclosed in Cerquone et al, and it would obvious to use any known reducing agent for silver salt of an organic acid taught in EP'196 with an expectation of success.

The Declaration under 37 CFR 1.132 on October 6, 2003 fails to overcome the prima facie case of obviousness rejection set forth above. First, the scope of the claimed invention encompasses the scope of the color photothermographic material taught in either Takeuchi or Nakamura et al. The Experiments 1 to 6 are related to the replacement of the compound of formula (I-1) in lieu of the yellow coupler, magenta coupler and cyan coupler in the material of either Takeuchi or Nakamura. The compound I-1 is a bisphenols reducing agent. This showing is not directed to the present issue provided in the rejection above. The remaining issue is how the reducing agent for silver salt taught in EP'196 affect the color photothermographic material taught in Takeuchi or Nakamura et al since the difference between Takeuchi and Nakamura et al is the bisphenols reducing agent for silver salt of an organic acid. Second, The results Experiment 7:criticality of the molar ratio is not persuasive. The sample is related to black and white material while the scope of the claimed invention encompasses a color photothermographic material taught in the prior art. The showing is not relevant to the applied prior art. The Experiment 7 is related to the criticality of the molar ratio, while the percentage of the amount of compound of formula (1) relative to the compound of formula (2) claimed.

Art Unit: 1752

Therefore, the criticality of the percentage of the amount of the formula (1) relative to the formula (2) cannot be determined. The molar ratio and the percentage are not equivalent.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1700.

tchea *tlc*
November 25, 2005

Thorkha
Thorl Chea
Primary Examiner
Art Unit 1752